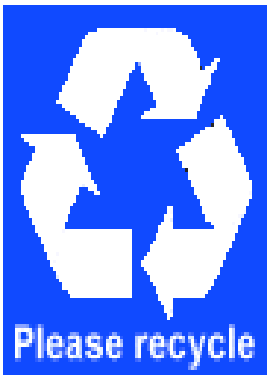

Recycling Lines

Electronic Newsletter **MAY 2011**

Virginia Department of Environmental Quality
P.O. Box 1105, Richmond, Virginia 23218 (804) 698-4029 Fax (804) 698-4224.

DEQ's Community Involvement Initiative: The Department of Environmental Quality is dedicated to helping the public better understand DEQ's role in protecting the environment, and to involving the public more effectively in environmental decision making.

Glass Recycling News

Virginia jurisdictions struggle each year to find economic and viable markets for the container glass they collect each year for recycling. Cullet processing for the glass industry is located primarily in North Carolina, and transportation costs result in recycling at a cost for most Virginia localities. Recent information at the Carolina Recycling Conference on glass recycling is presented below.

Fisher Recycling in North Charleston, South Carolina, collects glass six days per week from commercial sources, which is then processed in a pulverizer and trommel into a number of products. Among these are one-of-a-kind counter tops, landscape materials, sandblast products and paving materials. The firm holds an inventory of about 3,000 tons in its warehouse.

Dare County, North Carolina purchased a glass crusher, due in part to a new state law that required bars and restaurants which serve alcoholic beverages to prepare glass bottles for recycling. The county's recycling center now processes about 600 tons per year of glass through its $200,000 system. The glass is used by local residents and governments as supplementary material for parking areas, for use in flower beds, roadbed material and other similar uses.

Reflective Recycling has developed a number of creative ways to collect and process post-consumer and industrial glass. The firm operates 4 plants in the Carolinas, with a major portion of the glass in the region coming from collections from hundreds of bars and restaurants in North Carolina. Processed cullet is then sold to glass container manufacturers.

Owens-Illinois is one of the major users of Reflective Recycling's glass. O-I has a company goal to double the recycled content of a U.S.-made bottle to 60 percent by 2017. The company currently uses about 1.5 million tons of post-consumer scrap glass in the U.S.
Owens-Illinois is rolling out a regional cullet supply program in which it plans to help expand recovered glass volumes in the regions surrounding its U.S. manufacturing plants, rather than buying cullet from distant suppliers.

Stay tuned for other news in this area.

Welcome *to Recycling Lines. If you have suggestions on future topics for the newsletter, please send the information to Steve Coe at* **steve.coe@deq.virginia.gov.**

Did You Know?

- Armstrong World Industries has diverted more than 100 million square feet of ceiling tiles from landfills, amounting to over 50,000 tons of material as part of its Ceiling Recycling Program. The program, which has been around since 1999, collects old ceiling tiles from building owners that are then turned into new ones.
- Sprint has partnered with Earth911 to offer the environmental organization´s free iRecycle app on the Android mobile phone platform. The Earth 911´s mobile app is also available on Apple devices.
- Office supply retailer Office Depot is launching a new electronic waste recycling program in schools and classrooms called Recycling Rules. The program will place collection boxes for commonly used electronic products inside schools, and once full, will send the boxes off for recycling, returning any value earned from the recycling to the schools. Visit www.officedepot.com/environment.

US Recycling Stamp

The U.S. Postal Service today announced a new line of stamps exhorting customers to "go green" and put the proverbial stamp on sustainability. The USPS today issued a series of 16 stamps, each suggesting small environmentally-friendly actions — including recycling and reusing shopping bags — in a ceremony which included a three-wheeled electric mail delivery vehicle dropping off indigenous trees "symbolic of USPS delivering a greener America," according to a press release announcing the stamps.

The stamps demonstrate individual actions — from saving energy or water to reducing waste — that add up to a big difference for citizens' health and the environment.

Visit usps.com/green for more information about the stamps.

Calendar of Events

May 9-11: Virginia Recycling Association's Annual Conference, Virginia Beach. www.vrarecycles.org.

Food Waste Diversion to Composting at VT

According to the Office of Energy and Sustainability Initiatives, nearly 5 pounds of trash a day is accumulated per campus resident at Virginia Tech. Since 2009, Virginia Tech Dining Services has been trying to lower this statistic by collecting food waste from the dining centers and composting it, rather than sending it to a landfill. In April 2008, a food waste study was conducted in D2, a campus dining facility, measuring post-consumer food waste left on plates and trays. When the trays were removed from the dining center, D2 was able to decrease food waste by 30 percent over the course of a week, equal to more than 1,000 pounds of food. By July 1, 2008, D2 and Shultz dining centers removed dining trays permanently.

Virginia Tech generates a significant amount of food scrap from producing and serving tens of thousands of meals each day, totaling more than 6.1 million meals per year. Composting this waste prevents it from sitting in a landfill and producing methane, which is damaging to the atmosphere. Dining Services' composting program began in January 2009 when the first load of compost was picked up from Southgate Food Processing Center, which generates about 2.5 tons of waste per week. In fall 2009, composting programs were established at Personal Touch Catering and Owens Food Court, saving 7 tons of waste in their first month. In 2010, D2 began composting and saved 13 tons of waste in its first month. The efforts of these facilities helped divert more than 300 tons of waste from being sent to a landfill in 2010.

Virginia Tech Dining Services is working to be a leader in sustainability, and composting provides the university with the opportunity to be more sustainable. Every day, space is being saved in local landfills because of the facilities provided on campus, preventing greenhouse emissions and supporting sustainable agriculture by creating healthy soil amendments for the Dining Services Garden at Kentland Farm.

Students can also get involved in sustainability efforts, especially during the RecycleMania program. RecycleMania aims to increase the Virginia Tech community's awareness of waste management and recycling programs while increasing recycling participation. In 2010, the university increased total recyclables by 6.6 percent and reduced trash by 4.7 percent.

The Division of Student Affairs at Virginia Tech encompasses departments dedicated to providing a rich co-curricular experience and essential student services. Virtually every aspect of a student's life outside the classroom is represented through the division's departments.

Information above excerpted from an article in the Virginia Tech News written by Stephanie Paradiso of Rockville, Md., a senior majoring in communication in the College of Liberal Arts and Human Sciences at Virginia Tech.

NRC and RONA Partnership?

Leaders of the National Recycling Coalition (NRC) and the Recycling Organizations of North America (RONA) report the two groups are discussing possible ways to work together or potentially unite.

Board members and leaders from NRC and RONA, and the Recycling Organizations Council (ROC), met recently and say that one reason for the ongoing discussions is that some state recycling organizations have urged them to come together. The leaders involved in the negotiations say they feel positive about the discussions. A number of specific ideas were talked about, and discussions will continue over the coming months.

For information about each organization, visit the following websites:

www.nrcrecycles.org and www.recyclingorganizations.org.

What Else Can Banana Peels Do?

To the surprisingly inventive uses for banana peels, which include polishing silverware, leather shoes, and the leaves of house plants, scientists have added purification of drinking water contaminated with potentially toxic metals. A recent report concludes that minced banana peel performs better than an array of other purification materials. (American Chemical Society's journal, Industrial & Engineering Chemistry Research)

Scientists note that mining processes, runoff from farms, and industrial wastes can all put heavy metals, such as lead and copper, into waterways. Heavy metals can have adverse health and environmental effects. Current methods of removing heavy metals from water are expensive, and some substances used in the process are toxic themselves. Previous work has shown that some plant wastes, such as coconut fibers and peanut shells, can remove these potential toxins from water. In this report, the researchers wanted to find out whether minced banana peels could also act as water purifiers.

The researchers found that minced banana peel could quickly remove lead and copper from river water as well as, or better than, many other materials. A purification apparatus made of banana peels can be used up to 11 times without losing its metal-binding properties, they note. The team adds that banana peels are very attractive as water purifiers because of their low cost and because they don't have to be chemically modified in order to work.

Web Links of Interest:

http://www.sprint.com/responsibility (learn about the environmental app available from Sprint)

http://www.recycledplastic.com/resource/plastic-recycling/what-happens-inside-a-recycling-plant